## **100N Area cleanup a challenge for ERC team**

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The Bechtel Hanford-led Environmental Restoration Contractor team is facing a new set of challenges as it begins the removal of contaminated material near Hanford's N Reactor, the site's last operating production reactor.

The goal is to safely and efficiently dispose of waste that is significantly more radioactive than the other ER remediation sites. It's a challenge the team is addressing with basic radiation protection principles of time, distance and shielding as well as with employee involvement and training.

The N Reactor remediation effort entails removing about 150,000 tons of soil and debris from the holding ponds (called "cribs") and trenches that held the transported contaminated water discharged from the reactor coolant system and the fuel basin.

N Reactor was shut down in 1987. The 13 years of inactivity at the site constitute a relatively short period of time compared to other ER Project cleanup sites. As a result, the contamination is up to 50 times more radioactive.

The contaminated materials will be safely deposited in the Environmental Restoration Disposal Facility, or ERDF, adding to the more than 2.4 million tons already disposed of there by the ERC team.



Field personnel spray a combination of water and a fixative agent to eliminate dust and the potential spread of contamination as concrete cover panels are crushed to provide access to the 116-N-3 Trench. The ERC team began excavating contaminated soil and debris from the trench on Friday, July 21.

"I am excited about beginning remediation in the N Area," said Glenn Goldberg, 100 N Area Remedial Actions Project manager for the U.S. Department of Energy's Richland Operations Office. "These are two of the most contaminated cribs on the Hanford Site, and the start of this remedial action reinforces DOE's commitment to cleaning up waste sites and protecting the environment."

Rick Donahoe, project lead for BHI, said the ERC team, which includes Foster Wheeler Environmental Corporation, has taken extra precautions to minimize personnel radiation exposures and any impacts on the surrounding environment. "We have reviewed the potential exposure issues at length with our crews and every person has received project-specific training," said Donahoe. "In addition, supplemental dosimeters will help us to monitor exposure."

Efforts to minimize radiation exposures not only involve the crews that will be physically working around the cribs and trenches, but also the employees at the ERDF and truck drivers transporting the materials.

Ben Moyers, area superintendent at ERDF for BHI's Remedial Action and Waste Disposal Project, explained some of the steps being taken at ERDF. "We are placing lead shielding between the disposal truck drivers and the drag-off boxes to limit driver exposure," said Moyers. "And we will move the materials from the remediation site to ERDF on swing shift when there are fewer personnel in the work areas and along transport routes."

The Washington State Department of Ecology has regulatory oversight of the project. Rick Bond, N Area Project lead for Ecology, is pleased with the preparations for the project. "The project team has been very thorough and professional," said Bond. "While the project is very challenging, the team has demonstrated that they are ready to meet those challenges."

Over the projected 26-month duration of this job, the ERC team will continue the practices that protect the surrounding environment. "As with all soil remediation projects, we take precautions to ensure that we do not spread the contamination," Donahoe explained. "An example is our requirement to temporarily halt soil removal when winds are strong enough to generate dust in the area."

Donahoe also said crews use water to suppress any dust while work is under way. And, at the end of the workday, they will cover the remediation site with a fixative spray to contain the contamination. •